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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,137	06/21/2005	Nohee Park	5184-0101PUS1	5350
2292 7590 04/23/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER OVEISSI, DAVID M				
ART UNIT		PAPER NUMBER		
2416				
NOTIFICATION DATE		DELIVERY MODE		
04/23/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/540,137

Applicant(s)

PARK ET AL.

Examiner

DAVID OVEISSI

Art Unit

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-23 is/are pending in the application.
4a) Of the above claim(s) 1-12 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 13-23 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 21 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. This communication is in response to the amendment of 12/29/2008.

Accordingly, claims 1-12 were CANCELLED and NEW claims 13-23 were added that changes the scope of the claimed invention, and therefore are subject to a new ground of rejection. Currently, claims 13-23 are pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13- 23 are rejected under 35 USC 103(a) as being unpatentable over **Proctor et al.** (US 2003/0182108 A1) in view of **Kavner** (US 6,289,390 B1).

Regarding claims 13, 15-16, 19, 20-21, and 23 **Proctor** teaches a method/mobile terminal configured to interoperate with a mobile communication system simultaneously providing multiple services, the multiple services including a voice

service, a text service, and an image service, through a wireless traffic channel, the mobile terminal comprising:

a vocoder configured to vocode voice data with a variable vocoding rate to produce a plurality of voice frames, including vocoding detected speech into a speech frame with a predetermined maximum vocoding rate and vocoding periods without detected speech into a non-speech frame at a vocoding rate lower than the predetermined maximum vocoding rate (see abstract "variable rate determiner-full rate and eighth rate 324/340", Fig. 1 "VOCODER" paragraph 3 "compressed speech is sent at full rate whereas pause is reduced at eighth rate", paragraphs 6-7, 25 "RDA", paragraph 8 "silence period is treated at lower coding rate by EVRC", paragraph 27 "transition from full rate to lower rate in the variable rate vocoder is well known in the art");

a voice frame checker configured to determine whether or not one of the plurality of voice frames is vocoded with a vocoding rate less than the predetermined maximum vocoding rate and to output a corresponding check result (see paragraphs 7, 25 "RDA and half-rate, full-rate, or eight-rate", paragraph 21 "messages are multiplexed with encoded speech to form full, half, or eight rate traffic frames", paragraph); and

a frame generator configured to:

if the check result indicates that the vocoding rate is less than the predetermined maximum vocoding rate, multiplex the one data segment and the one voice frame to generate a common frame, and to transfer the common frame to a wireless modem for transmission (see paragraph 3 "quite (silence or pause) period are

encode with lower-rate vocoder at eighth rate this allows multiplexing with other information" and paragraphs 7, 25 "RDA and half-rate, full-rate, or eight-rate"); and

if the check result indicates that the vocoding rate is not less than the predetermined maximum vocoding rate, transfer the one voice frame without the one data segment to the wireless modem for transmission (see Fig. 1 block diagram a wireless communication system", paragraph 20 "EVRC receives speech samples at a 64kbits/sec from the MSC 12 and uses EVRC that are well known in the art to reduce the data rate. Lower rate frames are produced during quite time or if commanded by the MUX").

Proctor does not teach a CMS (concurrent multiple service) processor configured to segment a to-be-transmitted CMS message of one of the multiple services into data segments limitation and modem device. However, **Kavner** from the same field of endeavor teaches this limitation (see column 44 lines 66-through 45 line 16 "concurrent transmission of messages associated with different service session and format of segments" and Fig. 21B "2106", Fig.22 "Mail segment, Chat segment, games segment", Figures 3&9 "MODEM"). Thus, it would have been obvious to the person of ordinary skill in the art at time of invention to use the CMS teachings of **Kavner** with in the vocoder of **Proctor**. This combination is possible because of the modularity of components. The motivation for this combination is to enhance the resource utilization of the wireless network while using multiple services.

Regarding claim 14 **Proctor** does not teach a mobile terminal, further comprising:

a memory connecting the CMS processor to the frame generator and configured to store the segments. However, **Kavner** from the same field of endeavor teaches this limitation (see abstract "memory allocated for segments", Fig. 8B "memory", and column 46 lines 22-37 "processor, segments are stored in the buffers"). Thus, it would have been obvious to the person of ordinary skill in the art at time of invention to use the CMS teachings of **Kavner** with in the vocoder of **Proctor**. This combination is possible because of the modularity of components. The motivation for this combination is to enhance the resource utilization of the wireless network while using multiple services.

Regarding claims 17-18 and 22 **Kavner** teaches a method/mobile terminal, further comprising:

a CMS data checker configured to (see column 18 lines 25-35 "client is configured to check"):

determine if individual frames of data received via the wireless modem include one voice frame multiplexed with a corresponding segment of CMS data (see column 46 line 54 "CHAT service permits voice communications"); and

for a frame of data determined to include one voice frame multiplexed with the corresponding segment of CMS data, extract and store the corresponding segment of CMS data from the frame (see column 46 lines 22-35 the packet 2100 is generated by the MCP layer 210 by extracting and multiplexing message data from the buffers and

the MCP layer 210 extracts and de-multiplexes the segments, and stores the corresponding MAIL, CHAT, and VIDEO GAMES buffers”),

wherein the CMS data processor is further configured to retrieve segments of CMS data stored in the CMS data checker with a predetermined time period, and to assemble the segments into assembled CMS data (see column 9 line34-50 “packet assembler/disassembler”, column 44 lines 53-65 “the messages are segmented on the originating side and reassembled at the receiving side”, and column 44 lines 34-40 “a timeout period”).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: **Bach et al.** (5,475,686), **Blakeney, II et al.** (US 7,072,388 B2), and **Bahrs et al.** (US 6,886,170 B1).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID OVEISSI whose telephone number is (571)270-3127. The examiner can normally be reached on Monday to Friday 8:00 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art
Unit 2416

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